



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,371	11/24/2000	Chang-Woong Yoo	P56218	3060

7590 06/04/2004

Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

EXAMINER

SHRADER, LAWRENCE J

ART UNIT	PAPER NUMBER
----------	--------------

2124

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/718,371

Applicant(s)

YOO, CHANG-WOONG

Examiner

Lawrence Shrader

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to the Applicant's amendment filed on 3/17/2004.
2. Claims 1 – 22 remain rejected and are pending.
3. The Applicants arguments have been fully considered, but are moot in view of the new grounds of rejection.

### ***Oath/Declaration***

4. The declaration filed on 11/24/2000 is acknowledged. However, the Applicant must disclose information material to patentability under 37 C.F.R. 1.56, not a portion of 37 C.F.R. 1.56 (in this case 1.56a). See 37 C.F.R. 1.61, which states the declaration must "state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56." A new oath/declaration is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 2124

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "input means for reading out the product key information ... when a product key of an operating system program being reinstalled is matched with the read-out product key information." in lines 9 – 12. There is insufficient antecedent basis for this limitation in the claim because "reinstallation" is introduced without any indication as to whether this reinstallation is part of the same installation mentioned in a previous limitation in claim 1, or part of another separate installation/reinstallation step at some time in the future. The Office is interpreting it as being part of the same initial installation as in the previous limitation in claim 1.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 4, 5; 8 – 10; 11, 12; and 21 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 (hereinafter referred to as Hoggarth) in view of "Installing Windows 98 on an Aptiva 2168 system" (hereinafter referred to as Aptiva), and further in view of Krosner et al., U.S. Patent 5,905,494 (hereinafter referred to as Krosner).

**In regard to claim 1:**

Art Unit: 2124

*"a storing means for storing the operating system program;"*

Hoggarth discloses a storing means for storing an operating system program (column 9, lines 25 – 38).

*"memory means storing information set by said BIOS ROM said memory means storing the product key information of the operating system, said product key information being input by a user, when the operating system program is installed in the storing means;*

*writing means for writing the product key information in the memory means;"*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). Although "product key information" is not explicitly noted, client serial number and any additional user defined data is allowed. However, the Aptiva reference explicitly discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as taught by Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

*"input means for reading out the product key information from the memory means and to inputting the read-out product key information in an information input window for product certification of the operating system program when a product key of an operating system program being reinstalled is matched with the read-out product key information."*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation.

**In regard to claim 2**, incorporating the rejection of claim 1:

*“...wherein the storing means is a boot device.”*

Hoggarth discloses a standard client device having memory and a boot mechanism (e.g., see Figures 1 and 2; Abstract).

**In regard to claim 4**, incorporating the rejection claim 1:

*“...wherein the writing means is a program installed in the storing means.”*

Hoggarth discloses an installation program that writes key information to memory (column 9, lines 25 – 38).

**In regard to claim 5**, incorporating the rejection of claim 1:

*“...wherein the input means is a program.”*

Art Unit: 2124

Hoggarth discloses an installation program that writes key information to memory (column 9, lines 25 – 38).

**In regard to claim 8:**

*“reading out the product key information from the auxiliary memory;*

*checking whether the read-out product key information is matched with product key information of an operating system program that will be reinstalled; and*

*if matched, automatically inputting the product key information in a product key information to input window displayed on a screen corresponding to an installation procedure for reinstalling the operating system program.”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, and the Aptiva reference discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2), but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation.

Art Unit: 2124

**In regard to claim 9**, incorporating the rejection of claim 8:

*“...wherein said step of checking comprises comparing the read-out product key information with product key information of an operating system program stored on a recovery CD-ROM in a CD-ROM drive.”*

Hoggarth discloses a CD-ROM in a CD-ROM drive for system administrator use (column 4, lines 26 – 29), and the APTIVA reference explicitly discloses a system recovery CD containing the product key information (page 2). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key from a CD-ROM as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as taught by Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

**In regard to claim 10**, incorporating the rejection of claim 8:

*“...wherein said step of checking comprises comparing the read-out product key information with product key information of an operating system program stored on a hard disk of a recovery hard disk drive.”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the



Art Unit: 2124

time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation.

**In regard to claim 11:**

*“manually inputting, using one of said input devices, product key information corresponding to said operating system program, said product key information being input into a product key input window of a product key input screen displayed on said display device;*

*executing a key input program stored on said hard disk for writing said product key information into a predetermined storage area of said CMOS RAM;*

*executing a recovery program stored in a recovery storage device when said operating system program fails;*

*reading out said product key information from said CMOS RAM when said recovery program is executed;*

*comparing said product key information read out from said CMOS RAM with product key information stored in said recovery storage device; and*

*automatically inputting the product key information read out from said CMOS RAM into said product key input window of the product key input screen displayed on said display device.”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). Although “product key information” is not explicitly noted, client serial number and any additional user defined data is allowed. However, the Aptiva

Art Unit: 2124

reference explicitly discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2), but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation.

**In regard to claim 12**, incorporating the rejection of claim 11:

*“...further comprising a step of storing said product key information manually input into said product key input window onto said hard disk.”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). Although “product key information” is not explicitly noted, client serial number and any additional user defined data is allowed. However, the Aptiva reference explicitly discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window

Art Unit: 2124

input means to input an operating system product key as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as taught by Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

**In regard to claim 21**, incorporating the rejection of claim 11:

*“...wherein the step of executing a recovery program comprises reading a recovery program stored on a second hard disk of a second hard disk drive.”*

See Hoggarth Figure 2 for various computer readable media available in the Hoggarth invention.

**In regard to claim 22**, incorporating the rejection of claim 11:

*“...wherein the step of executing a recovery program comprises reading a recovery program stored on a recovery CD-ROM in a CD-ROM drive.”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19), but does not explicitly disclose a recovery program. However, the Aptiva reference does disclose a recovery program (Page 2, no. 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the reading of a program from a disk as taught by Hoggarth with the program being a recovery program as taught by the Aptiva reference because the combination clearly allows one using the Hoggarth invention to modify the input program to include a recovery program as taught by the Aptiva reference on page 2.

Art Unit: 2124

8. Claims 3; 13, and 15 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of “Installing Windows 98 on an Aptiva 2168 system”, and further in view of Krosner et al., U.S. Patent 5,905,494, as applied to claims 1 and 12 respectively above, and further in view of Micali, U.S. Patent 5,793,868.

**In regard to claim 3**, incorporating the rejection of claim 1:

*“...wherein the memory means further stores information indicating the type of operating system program that was installed and indicating a compress conversion process of the product key information.”*

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches compression of product key information. However, Micali teaches a certificate revocation system in which certificate information is compressed (column 4, lines 29 – 46). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the certificate compression technique as taught by Micali because the compression of the product key information allows efficient conveyance of the information as taught by Micali at column 8, lines 6 – 9.

**In regard to claim 13**, incorporating the rejection of claim 12:

*“...said step of executing a key input program comprising the steps of:  
reading said key input program from said hard disk;”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the

Art Unit: 2124

memory means, but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation.

*“encoding said product information using a compression conversion process to produce encoded product key information; and”*

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches compression of product key information. However, Micali teaches a certificate revocation system in which certificate information is compressed (column 4, lines 29 – 46). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the certificate compression technique as taught by Micali because the compression of the product key information allows efficient conveyance of the information as taught by Micali at column 8, lines 6 – 9.

*“storing said encoded product key information in said predetermined storage area of said CMOS RAM.”*

Art Unit: 2124

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). It is well known in the art that CMOS RAM is implemented in many computer systems, especially used to store parameters in low power battery-backed memory as disclosed in the Microsoft Computer Dictionary, Fifth Edition, p. 105.

**In regard to claim 15**, incorporating the rejection of claim 13:

*“...wherein said product key information is comprised of a plurality of ASCII characters and said compression conversion process comprises the steps of:*

*converting each ASCII character into a six bit code; and*

*generating hexadecimal values for storage in said CMOS RAM by grouping the bits of the six bit codes corresponding to every four ASCII characters into three bytes.”*

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner teaches converting ASCII characters into six-bit code. Official notice is taken that conversion of ASCII code to hexadecimal format and mapping ASCII values into x-length strings of bytes in memory would have been well known to one skilled in the art at the time the invention was made for data packing. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of converting ASCII characters into six-bit code in order for the Hoggarth system to store information in hexadecimal format.

**In regard to claim 16**, incorporating the rejection of claim 15:

*“...wherein said step of converting each ASCII character into a six bit code comprises subtracting the hexadecimal value 30h from the hexadecimal of the ASCII character.”*

Art Unit: 2124

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches converting each ASCII character into a six-bit code comprises subtracting the hexadecimal value 30h from the hexadecimal of the ASCII character. Official notice is taken that subtracting 30h from the hexadecimal value of the ASCII character to convert the ASCII character would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of subtracting 30h from the hexadecimal value of the ASCII character to convert the ASCII character in order for the Hoggarth system combined with the auto fill form of Krosner to display ASCII characters in the pop-up window.

**In regard to claim 17, incorporating the rejection of claim 15:**

*“...wherein said step of converting each ASCII character into a six bit code comprises reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values.”*

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values. Official notice is taken that using a hexadecimal to binary conversion lookup table would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of reading preset hexadecimal values for each ASCII character from a code table and changing the

Art Unit: 2124

read hexadecimal values to binary values in order for the Hoggarth system combined with the auto fill form of Krosner to more efficiently processed the code.

**In regard to claim 18**, incorporating the rejection of claim 13:

*“...wherein said product key information is comprised of a plurality of ASCII characters and said compression conversion process comprises the steps of:*

*converting each ASCII character into a five bit code; and*

*generating hexadecimal values for storage in said CMOS RAM by grouping the bits of the five bit codes corresponding to every three ASCII characters into two bytes.”*

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches converting ASCII characters into six-bit code. Official notice is taken that conversion of ASCII code to hexadecimal format and generating hexadecimal values for storage by grouping the bits of the five bit codes corresponding to every three ASCII characters into two bytes would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of converting ASCII characters into six-bit code in order for the Hoggarth system to store information in hexadecimal format more efficiently than straight ASCII format.

**In regard to claim 19**, incorporating the rejection of claim 18:

*“...wherein said step of converting each ASCII character into a five bit code comprises reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values.”*

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches reading preset hexadecimal values for each ASCII



Art Unit: 2124

character from a code table and changing the read hexadecimal values to binary values. Official notice is taken that using a hexadecimal to binary conversion lookup table would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values in order for the Hoggarth system combined with the auto fill form of Krosner to more efficiently process the code.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system," and further in view of Krosner et al., U.S. Patent 5,905,494, and further in view of Micali, U.S. Patent 5,793,868, as applied to claim 13, and further in view of Miura, U.S. Patent 6,021,408.

**In regard to claim 14**, incorporating the rejection of claim 13:

*"...further comprising a step of uninstalling said key input program from said hard disk after said storing step."*

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches deletion of the writing program after the product information is written to memory. However, Miura teaches the deletion of a program after execution (column 4, lines 29 – 33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the function of

Art Unit: 2124

deleting a program after execution as taught by Miura, because this combination provides another level of security to the by preventing an unauthorized installation in the case where only one installation is allowed, and frees up memory resources.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system," and further in view of Krosner et al., U.S. Patent 5,905,494, as applied to claim 11, and further in view of Pearce et al., U.S. Patent 6,243,468 (hereinafter referred to as Pearce).

**In regard to claim 20**, incorporating the rejection of claim 11:

*"...further comprising a step of checking a checksum of said product key information read out from said CMOS RAM before comparing said product key information read out from said CMOS RAM with product key information stored in said recovery storage device."*

Neither Hoggarth, Aptiva, nor Krosner teaches the checking of a checksum of stored key information. However, Pearce teaches the use of a checksum in associated with the product key information (column 2, lines 44 – 60). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the configuration system of Hoggarth with the checksum feature of Pearce, because the checksum provides a layer of error correction, and also security, by ensuring that the proper information is being used for the key product information, especially in a transmission download over a network as taught by Hoggarth (e.g., see Figure 2).

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system."

Art Unit: 2124

**In regard to claim 6:**

*“making a user manually input the product key information corresponding to a procedure of installing the operating system program;”*

*“executing a product key information writing program;”*

*“writing the manually input product key information into the auxiliary memory.”*

Hoggarth discloses a computer system with a central processing unit, a main memory, a BIOS ROM an auxiliary memory for storing information set by the BIOS, having an operating system with product key information and a method of writing that information to the auxiliary memory when an operating system is installed (e.g., Figure 2 and applicable text at column 4, lines 1 – 16). The system prompts the user for information about the system collected at install time and an installation program writes the information into non-volatile (auxiliary) memory (column 9, line 25 to column 10, line 20). Hoggarth does not explicitly disclose any of the installation information as product key information. However, the Aptiva reference explicitly discloses a product key for an operating system input by a user during an installation procedure. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as taught by Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

Art Unit: 2124

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system," as applied to claim 6 above, and further in view of Miura, U.S. Patent 6,021,408.

**In regard to claim 7, incorporating the rejection of claim 6:**

*"...further comprising a step of deleting the product key information writing program after the product key information is written into the auxiliary memory."*

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches deletion of the writing program after the product information is written to memory, although one skilled in the art would have reasonably expected that software no longer needed would be deleted as is well known in the art with JAVA automatic garbage collection systems. However, Miura teaches the deletion of a program after execution (column 4, lines 29 – 33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the function of deleting a program after execution as taught by Miura, because this combination provides another level of security to the by preventing an unauthorized installation in the case where only one installation is allowed, and frees up memory resources.

Art Unit: 2124

*Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (703) 305-8046. The examiner can normally be reached on M-F 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence Shrader  
Examiner  
Art Unit 2124

24 May 2004

*Kakali Chaki*

**KAKALI CHAKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**